

PC-SUB WL-8 PC-SUB WL-10 PC-SUB WL-12

Thank you for choosing Phase Technology speakers. We know there are a wide variety of choices available today, and we sincerely appreciate your purchase of our product. Phase Technology speakers are built to exacting standards and will provide many years of listening enjoyment.

Our speakers are the result of over five decades of designing and manufacturing what many consider the finest sound reproduction products available. We hold several key patents in loudspeaker technology, including the soft-dome tweeter. Our mission, our passion is to constantly advance the art and science of accurate audio reproduction. Our dedication insures your new speakers will accurately reproduce all the impact, detail and delicacy of today's digital technology.

Regardless of application, serious audiophile listening or home theater, we recommend that you take the time to read this manual thoroughly before connecting speakers to your amplifier or receiver. In the highly unlikely event that you should experience a problem with set-up or operation, please contact one of our carefully chosen dealers for assistance, or contact us directly.

We trust that your new Phase Technology subwoofers will enrich your enjoyment of music and movies beyond your expectations.



PC-SUB WL-10

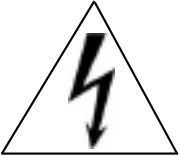
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PC-SUB WL SERIES FEATURES:


- 300 watt RMS, 900 watt peak power internal amplifier
- Signal sensing auto turn on/off
- Gain control
- Phase switch
- Variable crossover
- Wireless 2.4 GHz uncompressed audio streaming
- Line/LFE input
- Ultra long excursion woofers and passive radiators
- Servo-controlled amplifier, which monitors and adjusts output for dynamic and undistorted response

SAFETY INSTRUCTIONS



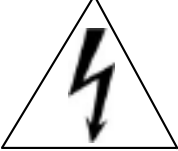
CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN




CAUTION: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.

Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you to the presence of un-insulated “dangerous voltage: within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

1. **Read Instructions** - All the safety and operating instructions should be read before the appliance is operated.
2. **Retain Instructions** - The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** - All warnings on the appliance and in the operating instructions should be adhered to.
4. **Follow Instructions** - All operating and other instructions should be followed.
5. **Water and Moisture** - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
6. **Carts and Stands** - The appliance should be used only with a cart or stand that is recommended by the manufacturer.
- PORTABLE CART WARNING**



7. **Wall or Ceiling Mounting** - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. **Ventilation** - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. **Heat** - The appliance should be situated away from heat sources such as radiators, stoves, or other appliances that produce heat.

10. **Power Source** - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. **Power Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed up or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
12. **Cleaning** - The appliance should be cleaned only as recommended by the manufacturer.
13. **Nonuse Periods** - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
14. **Object and Liquid Entry** - Care should be taken so that neither objects fall nor liquids spill into the inside of the appliance.
15. **Damage Requiring Service** - The application should be serviced by qualified service personnel when:

a. the power supply cord or the plug has been damaged,

b. Objects have fallen onto or liquid has been spilled into the appliance,

c. the appliance has been exposed to rain,

d. the appliance does not appear to operate normally or exhibits a marked change in performance, or

e. the appliance has been dropped or the cabinet damaged.
16. **Servicing** - The user should not attempt to service the appliance beyond those means described in the operating instructions. All other servicing should be referred to qualified service personnel.
17. **Grounding or Polarization** - Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.
18. **FCC Rules Part 15 Compliance** - This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.
APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR USAGE
CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE PLUG TO WIDE SLOT, INSERT FULLY.
ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRESE ET POUSSER JUSQU AU FOND.

PLACEMENT

Subwoofers offer the greatest variety of placement options since very low frequencies are essentially non-directional. That is, the human ear cannot determine where low frequencies originate, thus, speaker placement is open to a wide variety of choices. By using the wireless option, your PC-SUB WL subwoofer can be placed anywhere AC power is available within a 50-foot radius of the transmitter. It is recommended that you place the subwoofer along the same wall as your front speakers. If using one subwoofer, a corner placement will give you the most low frequency output. If using two subwoofers, start by placing them next to the front left and right speakers in both front corners or one in the corner and one 1/3 of the way along the front wall from the corner. Each room is different. Experiment with these options and try other locations until you get the best results.

HOOKING UP YOUR PC-SUB WL SUBWOOFER

Option 1: Wireless Setup

The PC-SUB WL wireless transmitter includes a power adapter. This power adapter is a universal adapter and is designed to operate on household power of 100-240V and 50/60Hz. Plug the power adapter into a convenient power outlet and the small coaxial power plug into the rear of the transmitter socket labeled “DC In +5V”. The transmitter should power up and display a blue LED light on the front of the unit.

Next, connect the “SUB/Left IN” on the wireless transmitter to the “Subwoofer Out”, “SUB OUT”, or “Pre-Amp Out” connection on the rear of your receiver or processor using a dedicated RCA interconnect cable. Plug the PC-SUB WL into a wall outlet and turn the power switch on. The power LED should turn red and the Wireless Status LED should be blue. The transmitter and the subwoofer now need to be synchronized (paired) so that they will recognize each other.

Transmitter / Receiver pairing instructions

Up to two PC-SUB WL Subwoofer systems can work in close proximity. When using two subwoofers each needs to be paired to its own transmitter. Pairing is done as follows:

1. Press the RESET button for the receiver unit on the back of the subwoofer once. The blue LED will start blinking quickly.
2. Press the button located on the bottom of the transmitter unit once. The Blue LED will start blinking quickly. After a few seconds both blue LEDs will stay on continuously. If pairing is not successful the blue LED on the Transmitter will start blinking slowly after 10 seconds. In this case, press the button on the transmitter again.

Note: There is no need to press the receiver button again (the button on the back of the subwoofer). The flashing Receiver LED indicates that the receiver is waiting for a transmitter to connect to it.

Two wireless PC-SUB WL subwoofers can be used simultaneously, but each requires its own transmitter. If you already have one system installed, then repeat the above process but press the transmitter button on the second transmitter twice in order to avoid interference with the first system. Our wireless topology uses adaptive frequency hopping. If interference is detected the transmitter and receiver automatically switch to another channel. If for some reason the pairing is interrupted then re-pairing will resolve the problem and return the system to normal operation.

NOTE: Recommended wireless operating range is 50 feet. The range depends on usage and obstructions between the transmitter and receiver.

Option 2: Wired Direct Connection Setup

This is the recommended (wired) method of connection for those applications where the Wireless Transmitter will not be used. **Never attempt to connect your PC-SUB WL using both the wired and wireless hookups.**

Most A/V receivers and processors are equipped with a “Subwoofer Out” or “Pre-Amp Out” connection. Run a dedicated RCA interconnect cable from the “SUB OUT” terminal on your receiver or amplifier to the “LINE IN” terminal on the subwoofer.

Bass Management

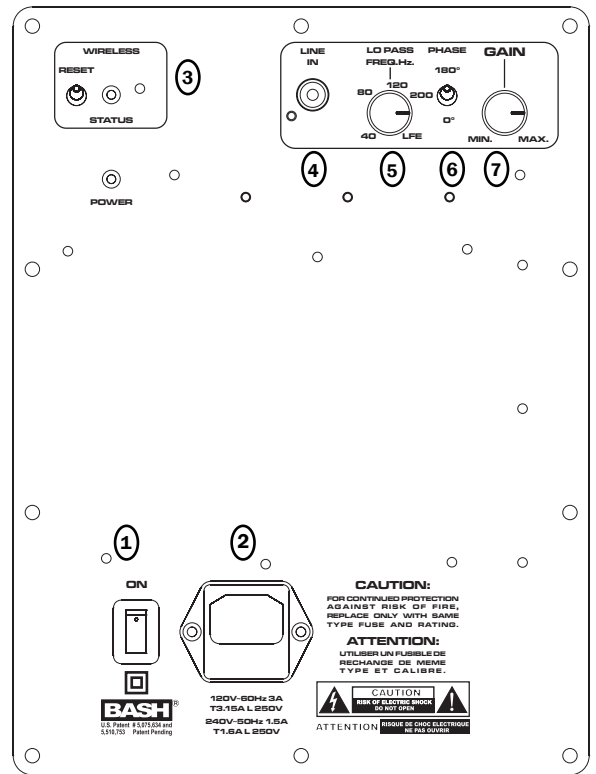
Many home theater receivers/processors have a “Bass Management” feature that controls how the bass is processed and delivered to the subwoofers. Look carefully in your amplifier or receiver’s instruction manual for details on how to adjust this feature for your system.

When used with a Dolby Digital or DTS-capable receiver/processor with the transmitter or subwoofer hooked to the sub out turn the “LOW-PASS FREQUENCY” control to the “LFE” setting on the back of your subwoofer.

If you are NOT using the receiver’s internal processor for subwoofer control then turn the “LOW-PASS FREQUENCY” control on the PC-SUB WL to the desired setting. Consult the instruction manuals for your amplifier/receiver and speaker system for their recommended setting. It may take some experimentation to find the best sound for your room and your system.

PC-SUB WL SERIES AMPLIFIER PANEL

- Power/Auto ON/OFF:** When this switch is left “ON”, the subwoofer automatically activates upon detection of an audio signal; the subwoofer goes into “STANDBY” after approximately ten (10) minutes of silence. The LED on the amplifier will change from Red to Green when an input signal is detected and the amplifier turns on.
- Power Input:** Connects to a standard AC power outlet with the supplied power cord. The PC-SUB WL is designed to adjust automatically to handle power sources of 100-240V, 50-60Hz. Please be certain that the proper fuse is installed on the amp for the input voltage used locally (see ratings on amplifier panel).
- Wireless Signal:** Blue LED light is on when wireless signal is being received. Press RESET to establish or re-establish a wireless connection. (See wireless set up instructions)
- Line In: FOR WIRED CONNECTION ONLY:** Using a high-quality RCA cable, connect the “SUB OUT” terminal on your receiver or processor to the “LINE IN” terminal on your PC-SUB WL subwoofer. (See wired setup connection instructions.)
- Low-Pass Frequency Control:** If using the crossover setting in your A/V receiver or processor, set this control to “LFE” (Low-Frequency Effects). If using the sub’s internal crossover, choose the setting that sounds best and matches the low-frequency cutoff of your main speakers. It may take some experimentation to find the best sound for your room and your equipment.
- Phase Control:** This adjustment matches the phase - the in and out movement of speaker cones - to that of your main speakers. Adjust this control by listening to music with bass content. The setting is correct when the bass sounds the fullest.
- Gain Control:** This adjustment increases or decreases the power, and thus volume, of the PC-SUB WL. As with the Phase Control and the Low-Pass Frequency Control, it may take some experimentation to find the best sound for your system.



PC-SUB WL Subwoofer Amplifier Panel
(on back of subwoofer)

VIBRATION ISOLATION PADS

Included with your PC-SUB WL are a set of four (4) gray disks with an adhesive backing. The Vibration Isolation Pads should be used whenever your subwoofer is installed on any hard flooring surface. These pads prevent the subwoofer from moving against the floor when played at high levels. To use the pads, simply peel off the paper backing from the four disks and apply one pad to the bottom of each of the rubber feet of the subwoofer.

Specifications	PC-SUB WL-8	PC-SUB WL-10	PC-SUB WL-12
Woofer	8" ultra long-throw mica graphite poly cone with NBR surround	10" ultra long-throw mica graphite poly cone with NBR surround	12" ultra long-throw mica graphite poly cone with NBR surround
Passive Radiator	8" ultra long-throw mica graphite poly cone with NBR surround	10" ultra long-throw mica graphite poly cone with NBR surround	12" ultra long-throw mica graphite poly cone with NBR surround
Magnet Assembly	12 lbs.	12 lbs.	12 lbs.
Wireless	2.4 GHz uncompressed audio streaming	2.4 GHz uncompressed audio streaming	2.4 GHz uncompressed audio streaming
Amplifier Power (Watts, continuous)	300	300	300
Amplifier Power (Watts, peak)	900	900	900
Frequency Response (-6 dB)	28-200 Hz (LFE)	24-200 Hz (LFE)	22-200 Hz (LFE)
Low Pass Crossover	40-200 Hz (variable) 24 dB/octave	40-200 Hz (variable) 24 dB/octave	40-200 Hz (variable) 24 dB/octave
Dimensions*	11 3/16" W x 12 1/8" H x 12 5/8" D	13" W x 13 3/8" H x 14 1/2" D	15 7/16" W x 16 1/4" H x 16 7/16" D
Finish	High-gloss Black or Satin Cherry	High-gloss Black or Satin Cherry	High-gloss Black or Satin Cherry
Shipping Weight	33 lbs.	38 lbs.	47 lbs.

*add 1" to depth for connecting cables